

Terreiro de Candomble
Salvador Bahia, Brazil



Thesis Defense - Joaquin Robles
June 18th @ 5pm - WAAC - West Room

Cover image: Google images. www.candomble.wordpress.com/2007/03/24/filhos-de-santo/ Accessed June 1, 2007



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Religion and Architecture:
Designing a temple of Candomble in Salvador Bahia,
Brazil

Joaquin Gustavo Robles

Thesis submitted to the faculty of the Virginia Poly-
technic Institute and State University in partial fulfill-
ment of the requirements for the degree of

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In
School of Architecture

Jaan Holt - Committee Chair
Paul Emmons - Committee Member
Susan Piedmont-Palladino - Committee Member

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Favela, Orisha, Sacred Architecture, Salvador,
Temple, Terreiro



Maes do santo dancing for the Orixa Oxumare

1. Verger, Pierre Fatumbi. *Orisha*. Paris: Edition
SA .M. Metaille, 1982

Attribution: All photographs were taken as part of Axis Mundi Brazil Studio. All subjects in the pictures agreed to be photographed. An official letter of permission from Axis Mundi has been submitted to Virginia Tech graduate school.

Religion and Architecture:
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Bahia, Brazil

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ABSTRACT

My thesis aims to create a place of worship for the people of the neighborhood of Plataforma, located in Salvador Bahia, Brazil. Candomble was introduced to Brazil during times of slavery and is the root of Afro-Brazilian culture. In the chaotic world of favelas (Portuguese for slums) the religion of Candomble brings people together and gives order to the community. The neighborhood's current temple also functions as the local priest's home. As an area of low socioeconomic status, Plataforma has been neglected, and so has its temple.

My design seeks to honor the importance of religion in this area of Brazil by using sacred architecture to create a structure that is culturally and religiously sensitive. Construction of the temple mimics the natural architecture of the favelas, and the materials used for the site can be found in the area.

My hope for this project is to work in collaboration with the non-profit organization *Axis Mundi*, to raise the funds and support necessary to build this temple for the community of Plataforma.



Omolu- Orixá in the religion of Candomble

3. Verger, Pierre Fatumbi. *Orisha*. Paris: Edition SA .M. Metallie, 1982



Sculpture of Eshu Orixá of Candomblé

4. Verger, Pierre Fatumbi. *Orisha*. Paris: Edition SA .M. Metailie, 1982

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I want to thank my thesis committee; Jaan Holt, Susan Piedmont-Palladino and Paul Emmons, for their encouragement and feedback which was essential throughout the development of my thesis. Each of these individuals made themselves available to me anytime that I needed them, was it after school hours or during their vacation days.

I want to thank Meghan Walsh from Axis Mundi. Meghan introduced me to the Brazil Studio which began in 2004 with myself and another student and continues to grow each year. Her advice and knowledge of architecture and the Brazilian culture contributed to the great results of my thesis.

Henry Hollander from the Center for his support, patience, and all of the administrative support he provided. George Makrinos, adjunct faculty and former student of the Center, for his input and talks about the project. His knowledge on how to make my the project clearer to other people through computer programs also had a great impact on the results of my thesis.

The backbone of my thesis was my family. First, I want to thank my wife for her understanding and sacrifices that she had to make in order for me to accomplish my goals. Last but not least, I want to thank my family as well as my wife's family for their encouragement and support throughout my years of architecture school and for always being there for me.

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Ogun- Orixa in the religion of Candomble

2. Verger, Pierre Fatumbi. *Orisha*. Paris: Edition SA .M. Metalie, 1982

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Introduction

My experience in Brazil began when I started working for O'Norte Architects in the Northeastern city of Recife. Working with the firm allowed me to experience Brazilian culture first-hand, including art, music, sculpture, and dance. My second trip to Brazil was through Axis Mundi, a non-profit organization that sponsors the Brazil Studio program. This design-build program recruits students and professionals in order to create community based projects involving architecture, landscape, and urban design.

The aim of the project with Axis Mundi was to repair a steep slope area in the neighborhood of Plataforma in Salvador Bahia that was challenging for elders and children, especially during periods of intense rain. In order to remedy the problem, the Brazil Studio set out to design-build a set of stairs in the target area. The site that we chose for the project was in front of the existing temple of Candomble. During the execution of the project, I began closely studying Candomble and realized that this religion is truly rooted in the people and culture of Brazil.

Suddenly, a neighborhood that made no sense was organized and unified. To my surprise, community members came forward, offering assistance, materials, and tools.



O'norte Office of creation_Recife, Brazil

5. Axis Mundi, Brazil Studio July 2004, <http://www.axismundi.us>

While the project was being completed, I had the chance to interact with and learn from the community around us. I was there day and night, rain or shine and was able to observe how the site was utilized by the community and how different elements, such as light, wind, and water, impacted the situation. During my stay in Plataforma, I also participated in the ceremonies of Candomble, which inspired me to come up with the focus for my thesis—a new temple.

The site for the new temple is a small one, measuring three hundred and forty square feet. Followers of the religion believe that the Gods of Candomble live on the ground, and so the temple can never be moved to a new site. Currently, the local priest resides on this land and holds services in his home. However, the site became available when he decided to move and dedicate the site for the construction of the new temple.

The opportunity to design the new temple allowed me to combine my interests in architecture and Brazilian culture with the community's need for a place to practice Candomble.



Children in the neighborhood of Plataforma
6. Axis Mundi, Brazil Studio August 2006, <http://www.axismundi.us>

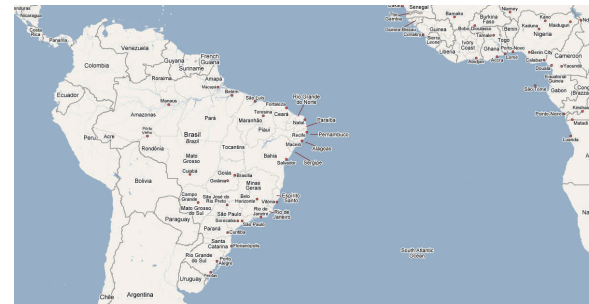


Students and the community
7. Axis Mundi, Brazil Studio August 2006, <http://www.axismundi.us>

Brief History of Brazil

The site for the proposed temple overlooks The Bay of all Saints, which was first encountered by Europeans and christened in 1502. The city of Salvador was founded in 1549 by a fleet of Portuguese settlers. Built in a high cliff overlooking The Bay of all Saints, Salvador quickly became Brazil's main sea port and the first colonial capital of the Portuguese Brazil. Following three centuries under the rule of Portugal, Brazil became an independent nation in 1822 and a republic in 1889.¹

By far the largest and most populous country in South America, Brazil overcame more than half a century of military intervention in the governance of the country when in 1985 the military regime peacefully ceded power to civilian rulers. Brazil continues to pursue industrial and agricultural growth and development of its interior. Exploiting vast natural resources and a large labor pool, Brazil is currently South America's leading economic power and a regional leader. Despite its stronghold within the South America economy, highly unequal income distribution remains a pressing problem.¹



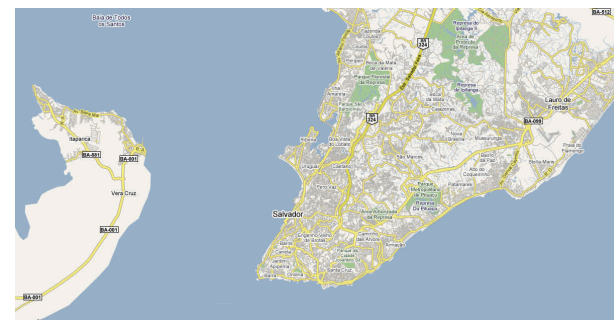
Map of South America

8. Google maps, <http://maps.google.com> Accessed September 2006



Map of Brazil

9. Google maps, <http://maps.google.com> Accessed September 2006



Map of Salvador Bahia, Brazil

10. Google maps, <http://maps.google.com> Accessed September 2006

Site study-Favelas

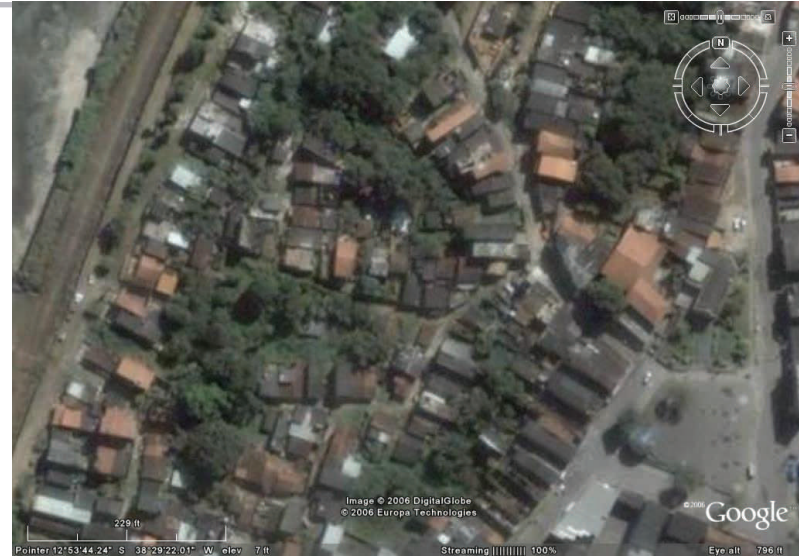
“The term Favela comes from the plant found in the semi-arid northeast region where refugees and former soldiers would settle on unclaimed land despite the unfavorable weather.”²

Favelas, as seen in image #11, are characterized by:

- Displaced people
- Units of irregular self-constructed houses
- Most are inaccessible by vehicles
- Houses are randomly built
- Circulation provided stairway and passageways
- Known as “quilombos” (independent towns for African Slaves)^{2,3}



Typical setting of a favela
11. Personal Photograph. Rio de Janeiro - August 22, 2006



Aerial view of the neighborhood of Plataforma
12. Google Earth. Aerial view Plataforma - Accessed September 2006



Site plan drawing of the neighborhood of Plataforma

Site study– Stair project

As previously stated, my thesis concept was conceived while working on a design-build of a community staircase in Bahia.

In preparation for the construction of the stairs, the site needed a significant clean-up. A leaking sewage had to be repaired in order to start the excavation. Used tires were collected from several auto tire shops and brought to the site. Dirt, which was used to pack the tires, was collected from the bottom of the hill and brought up with wheel barrels. After the intense packing was over, a mesh cloth was used to cover the tires and hold everything in place. Gravel and wire mesh were used for reinforcement. Concrete was prepared on-site and used to cover the dirt and tires and create the steps. Local wood and nautical rope was used for the railing. Ceramic tiles were then placed on the retaining walls and the steps. Finally, the stairs were painted to create the finished product. The total cost of the stairs was three hundred and forty dollars with the most expensive item was a plaque that we had a carpenter make to leave the names of the volunteers and a special message to the neighborhood of Plataforma.

Images 13-17

Axis Mundi, Brazil Studio August 2006, <http://www.axismundi.us>



Cloth and wire mesh - image 15



Packing the tires-image 14



Cleaning the site - image 13



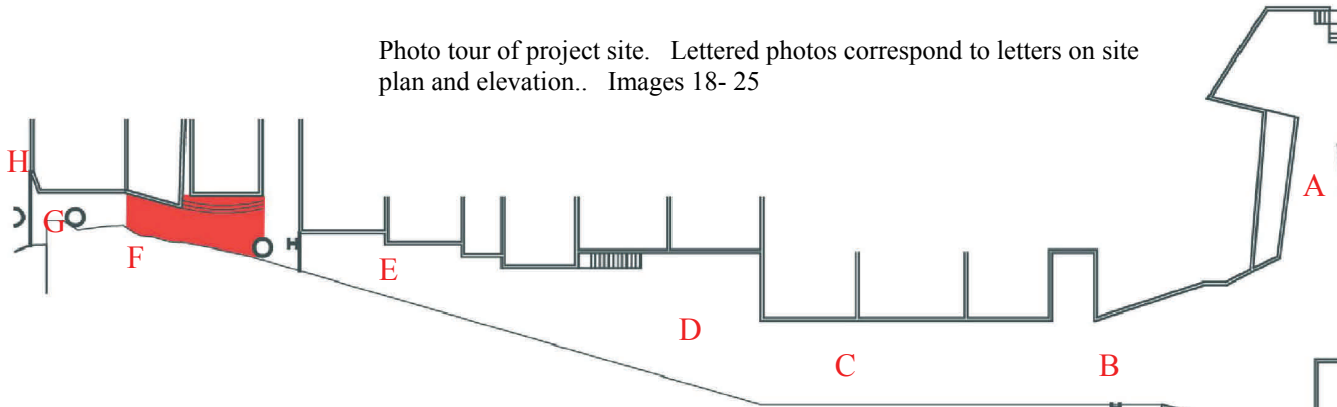
Finished stairs - image 17



Pouring concrete - image 16

Site study

Photo tour of project site. Lettered photos correspond to letters on site plan and elevation.. Images 18- 25



path towards the site



“H” - Image 25



“G” - Image 24



“F” - Image 23



“E” - Image 22



“A”
Image 18



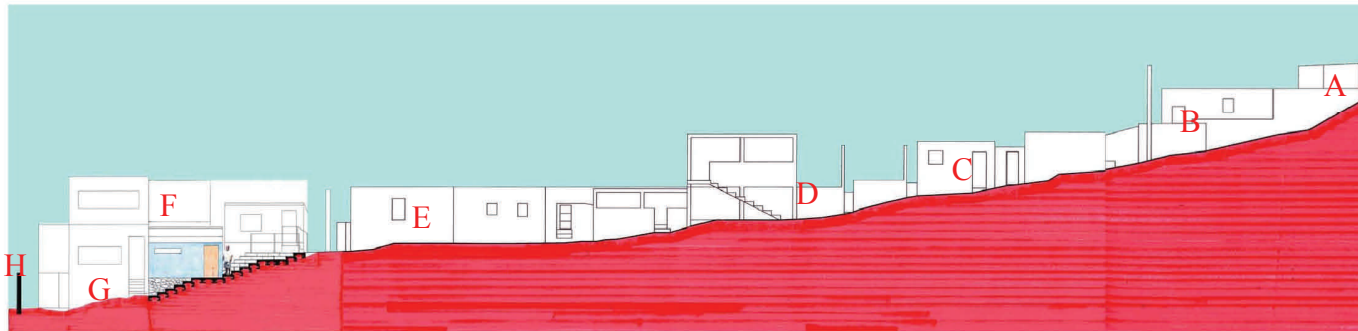
“B”
Image 19



“C”
Image 20



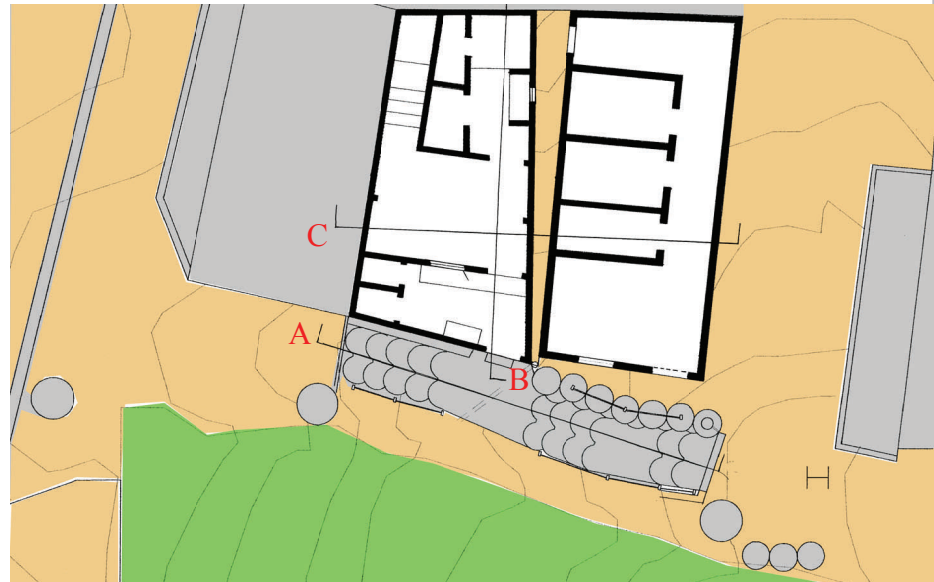
“D”
Image 21



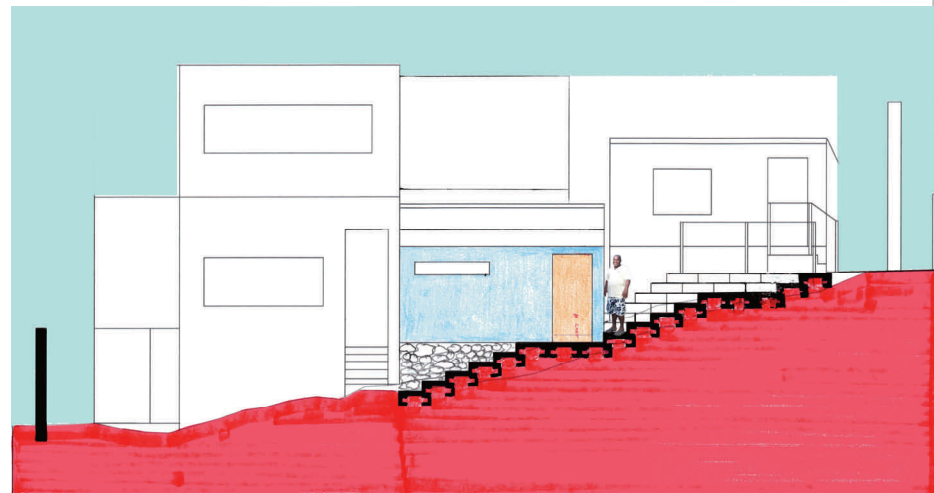
longitudinal section/elevation of the path towards the site

Site study

The entrance to the existing temple acts as the display area for the shrines of the Orixas, or Gods of Candomblé. Some of the display spaces are small stages of concrete and others are cubbies that are covered with cloth to minimize exposure to the outdoors or to separate certain Orixas. The front door of the residence is the actual entrance to the temple, revealing one common area that serves as the living room and gathering place when there is a ceremony of Candomblé. Through the opening on the right, straight from the front door, you enter the consultation space where the priest helps people with spiritual healing. To the left of the consultation space is another opening for the bathroom and straight ahead from the consultation space is the kitchen. The kitchen has two storage areas. From the living room, the opening to the left is very uncomfortable, a five foot area leading up the concrete steps to the bedroom. The residence/temple is built with reinforced concrete and infill brick. The roof is a wooden frame with corrugated fiberglass panels. There is not much light coming into the temple and the walls are soaked with humidity and covered with mold.

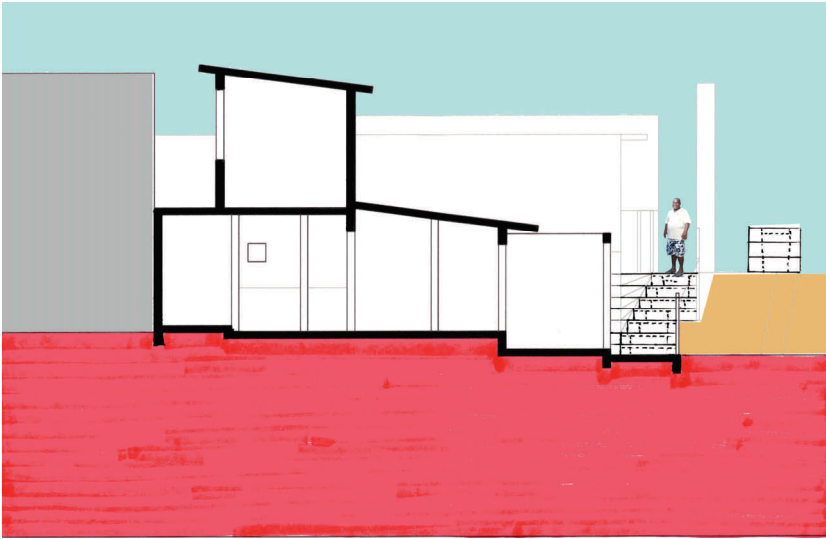


Existing condition of the site

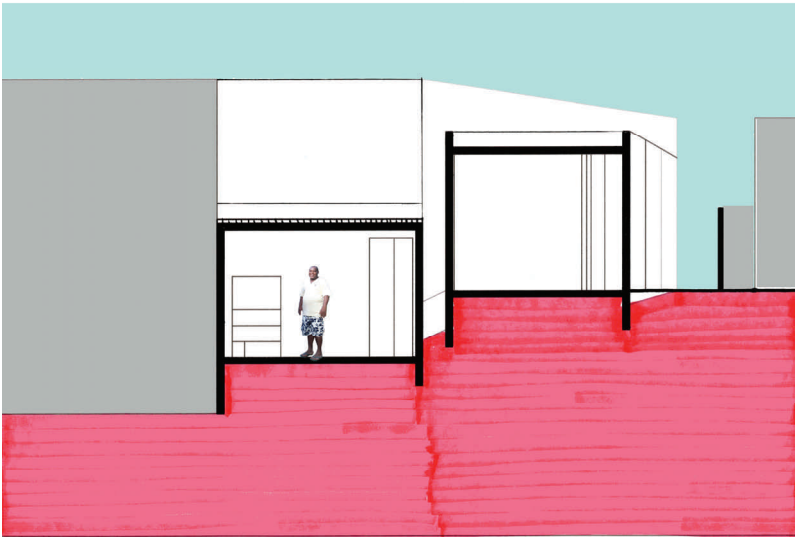


Section A of the stairs

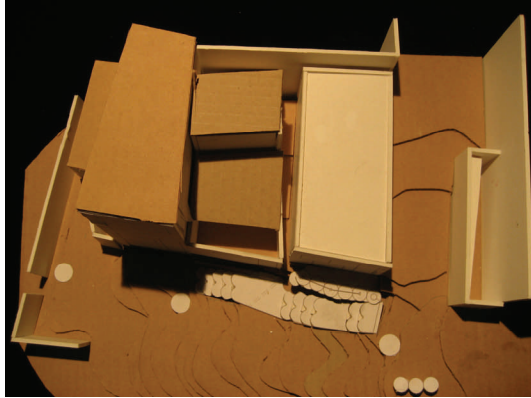
Site study



Section B of existing residence/temple



Section C of existing residence/temple



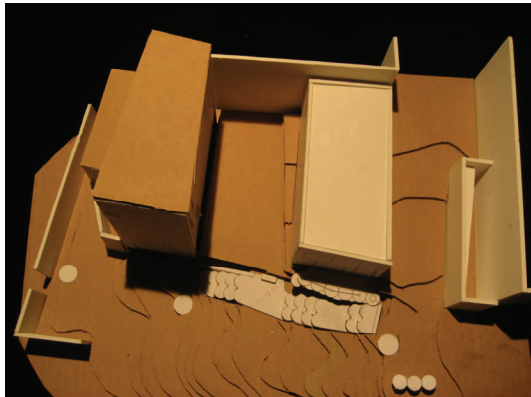
Aerial view of existing site



Model view from the bottom of the hill



Model view from the top of the hill



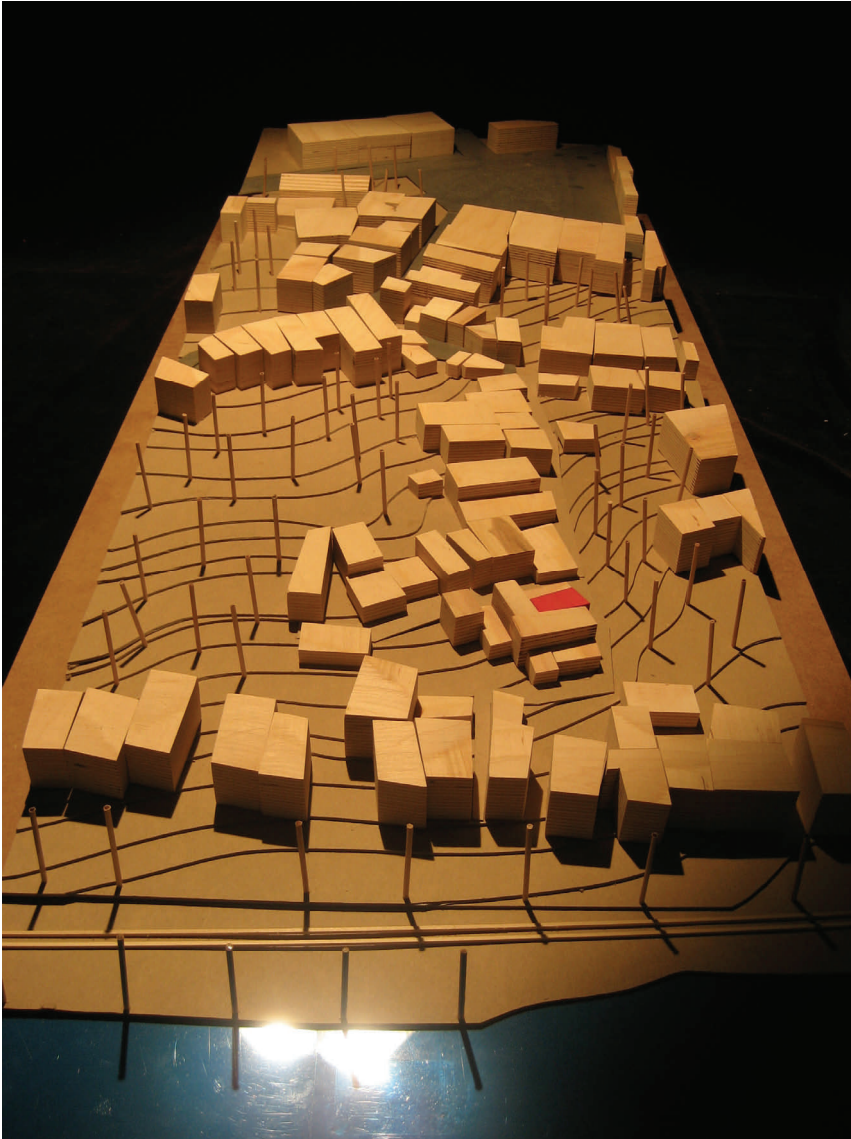
Aerial view of existing site with the existing residence/temple removed



Model showing the existing residence/temple removed



Model looking at the clear site from the top of the hill



Site Model view from the bottom of the hill

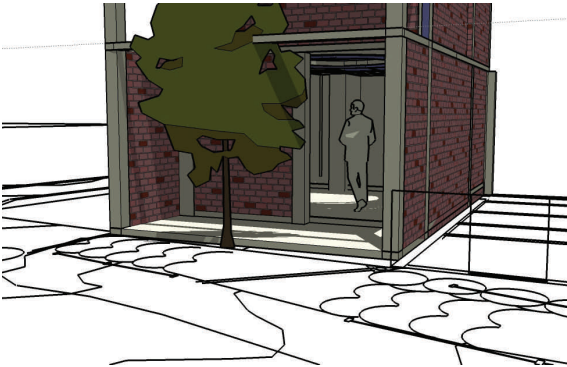


Site Model view from the top of the hill

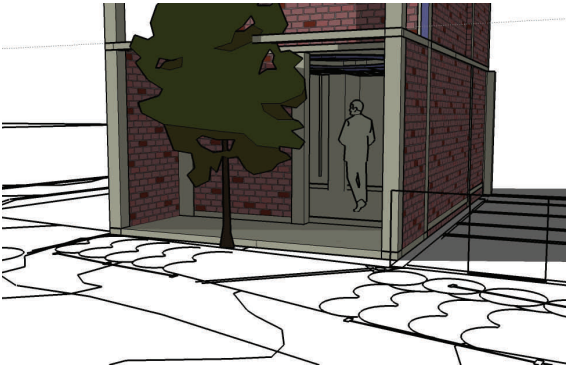
Site study- Sun study



Sun in December morning



Sun in December noon



Sun in December afternoon



Sun in June morning



Sun in June noon



Sun in June afternoon

Religion of Candomble

Candomblé is a religion that was brought to Brazil by Yoruba people from Nigeria.^{4,5}

Candomblé (which means 'dance in honor of the gods') is a religion based on African beliefs. It is also practiced in other countries, and has as many as two million followers.^{2,4}

The religion is a mixture of traditional Yoruba, Fon and Bantu beliefs. It has also incorporated some aspects of the Catholic faith over time.⁵

Music and dance are important parts of Candomblé ceremonies.⁶

The first official temple was founded at the beginning of the 19th century in Salvador de Bahia in Brazil.³

Slaves were initially forbidden to practice Candomblé. However because Candomblé incorporates some Catholic symbolism into it, the slave masters were happy that their slaves were celebrating and honoring the same religious figures they were.^{3,7,8}

Today, many of Brazil's population claims to be Roman Catholic, while also practicing Candomblé.⁸



Terreiro of Candomble in Salvador Bahia
26. Axis Mundi, Brazil Studio July 2006, <http://www.axismundi.us>



Terreiro of Candomble in Salvador Bahia
27. Axis Mundi, Brazil Studio July 2006, <http://www.axismundi.us>

Sacred Architecture

A significant challenge in designing and building a sacred space is to constantly consider the sanctity of space, not only in the design, but also with the materials used, the land it is built on and within the community it serves.^{2,9}

There is an important distinction between sacred and profane places. In profane places, ordinary everyday life occurs; work, play, relaxation and eating, A *Terreiro* (temple) is used as sacred space to communicate with the gods.⁹

Sacred Architecture differs from other types of architecture as Eliade describes in the book "The Sacred and the Profane" the creation of sacred space to imitate the work of the gods.⁹

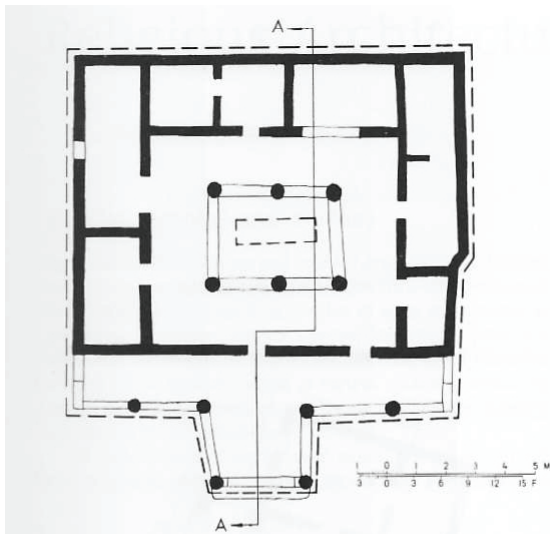


Fig.2.4. Ile Orisa Ikire. PLAN.

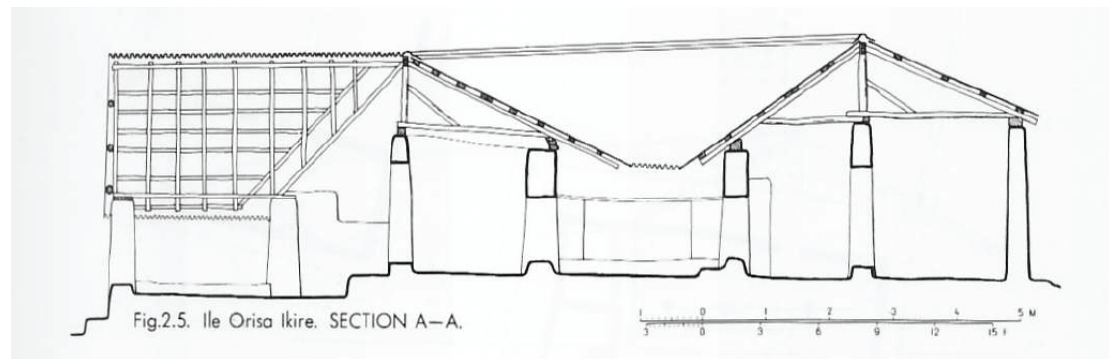


Fig.2.5. Ile Orisa Ikire. SECTION A—A.

Terreiro of Candoble Yoruba traditional architecture

28. Dmochowski, Z. R. *An Introduction to Nigerian Architecture, South-West and Central Nigeria*. Great Britain: Ethnographica Ltd, 1990

Design studies-Scheme A

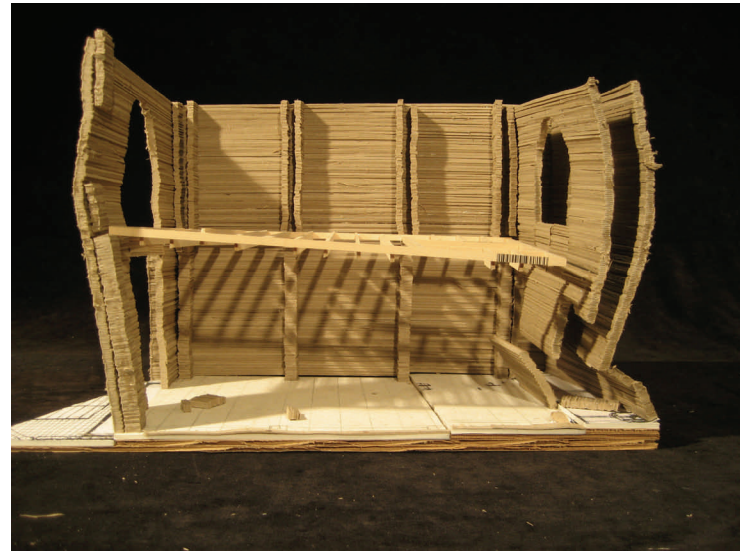
The design of scheme A consists of a center entrance leading to the ritual space. A set of stairs leads up to the second floor, which is wood framed, like many traditional Portuguese homes in the area.

The second floor is the sleeping area for students of Candomble, who come to the temple to be faithful followers of the religion. The room has an opening in the back and the front to let natural light enter the space.

The back of the building has a narrow passage-way on the first floor connecting the temple to the priest house .



Study model



Study model showing the interior space

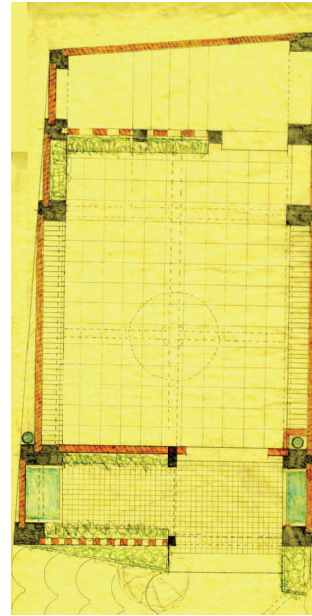
Design studies-Scheme B

The design for scheme B consisted of creating three areas for the temple. The first area is the entrance, where the Orixas were placed in the original structure. The front door is moved from the center to the right side of the temple to align with the stairs.

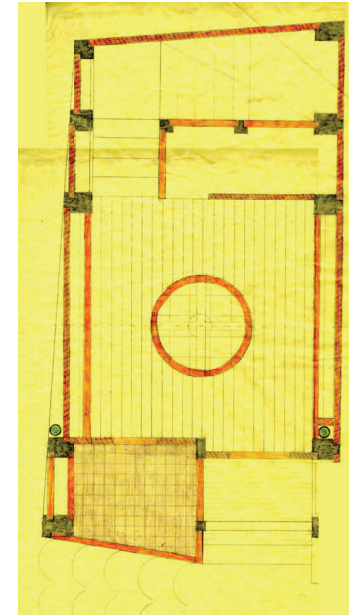
The middle space is the main room, where rituals take place, which has a pattern that marks the center. The back area acts as a light well, such as the one mentioned in scheme A, but also contains the stairs leading to the second floor and the connection to the priest's residence. The stairs are tucked behind another partition, similar to the wall from the front room that is used to display the Orixas.

The second floor is open at the center and the side allowing light to shine on the first floor. Brick partitions are acting as railing for the openings. There is a room created in the back for a possible bathroom or kitchen space. Towards the front of the temple there is a balcony space letting you experience the outdoor. This space overlooks the front entrance and allows people to look out towards the neighborhood.

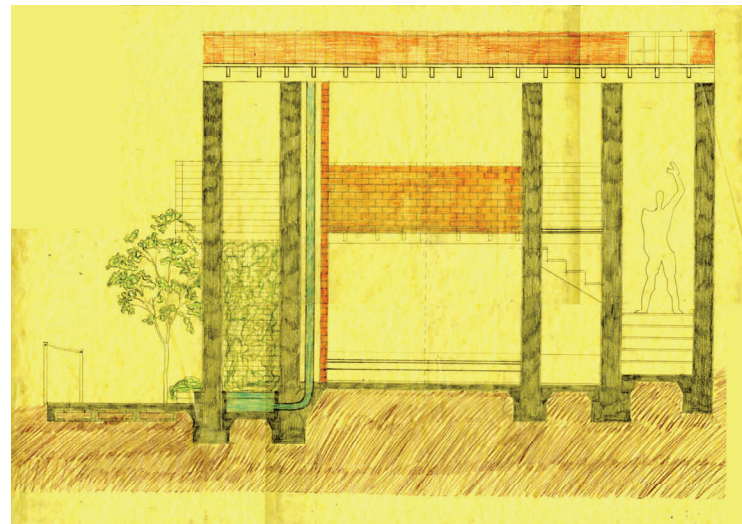
The roof is the traditional roof of the area, with wood framing and clay tiles. There is a skylight made with fiberglass panel that lets light go down to the stairs leading to the second floor.



First floor plan



Second floor plan



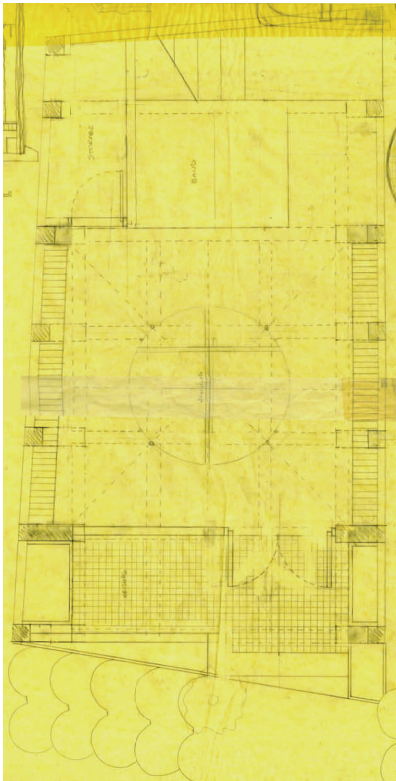
Section study

Design studies-Scheme C

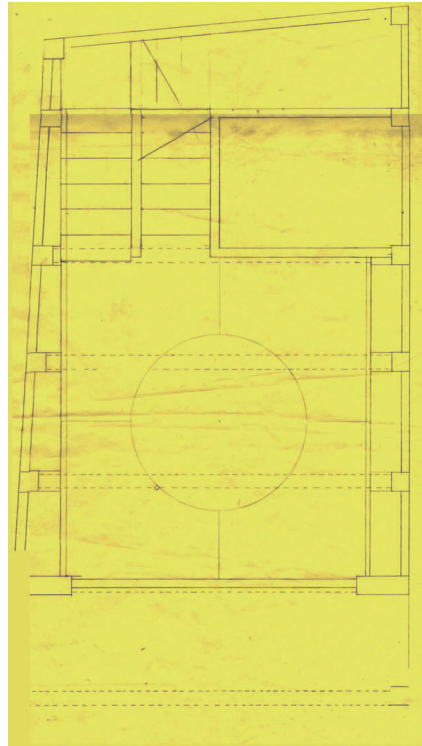
The design of scheme C has the same three major areas as scheme B. The first floor stays almost the same, with more columns added to the space.

The stairs going up to the second floor wrap around and continue to the third floor, which acts as a courtyard . The opening on the center of the floor is a little bigger than the opening from the previous scheme. The sides of the second floor are open, allowing light to go down.

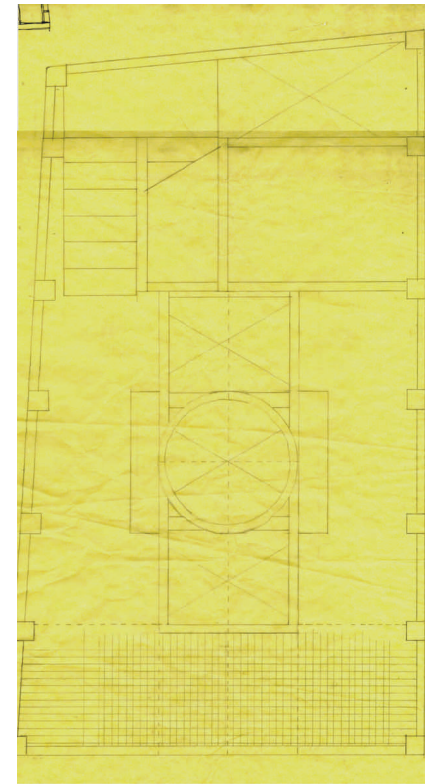
The third floor, acting as the courtyard space, is open at the center, letting natural light go down to the floors below. The balcony, which was previously on the second floor, is now on the third floor, creating a better view of the neighborhood as well as the horizon.



First floor plan



Second floor plan



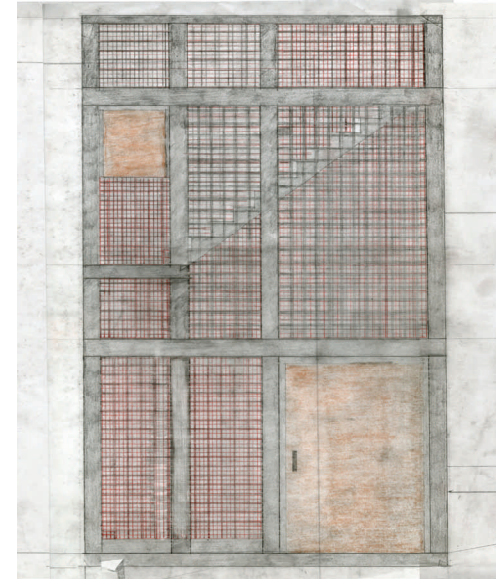
Third floor plan

Design studies-Scheme D

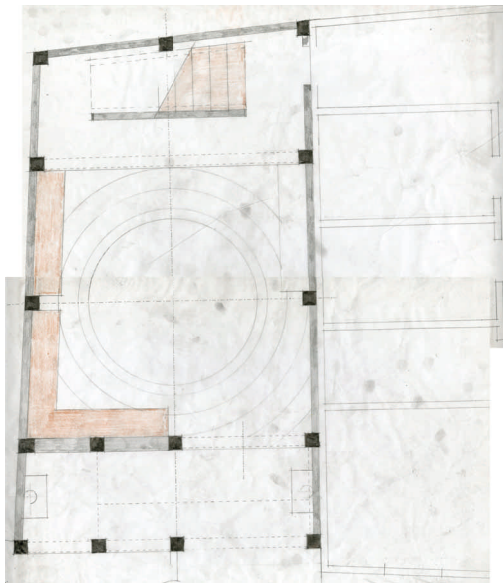
The main change on the design for scheme D includes benches that outline the ritual space on the first floor.

The second floor has a bigger opening at the center and no openings on the side walls. A small kitchen area and a bathroom are added to the space. A set of stairs towards the front of the temple make a continuous circular movement around the structure as people climb towards the third floor. Before reaching the stairs leading up to the third floor, there is a landing/balcony space.

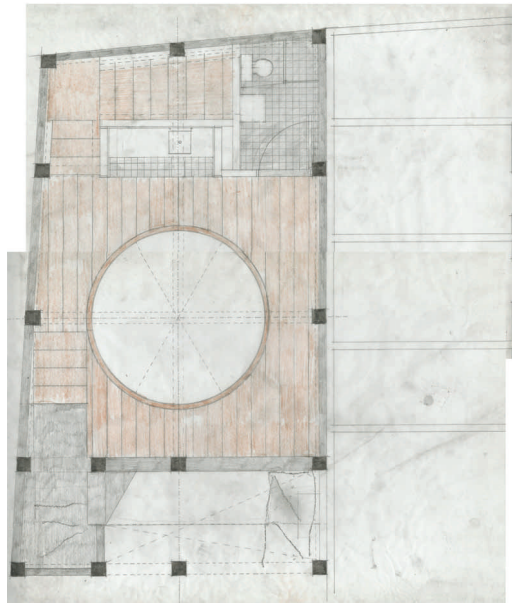
The third floor has the same size opening as the one on the second floor, with a cover on top to prevent rain water from entering the temple. The back light well is raised to allow sunlight to shine through towards the opening and the stairs.



North elevation



First floor plan



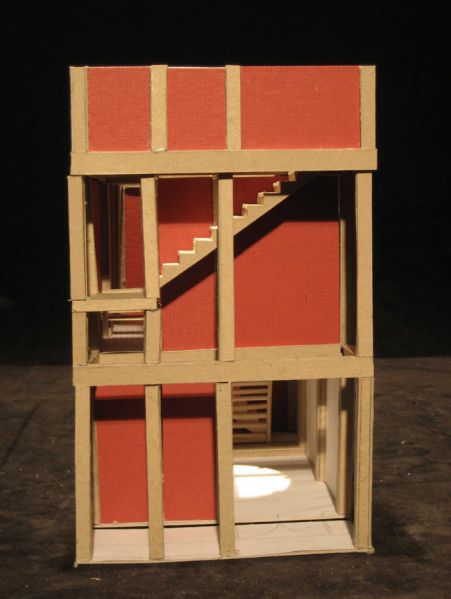
Second floor plan



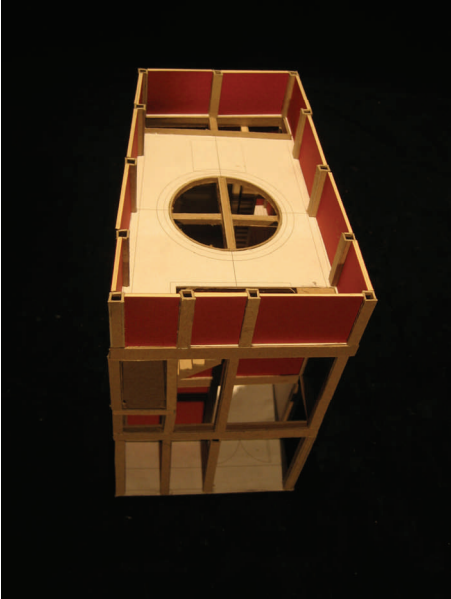
Section study

Design studies-Scheme D

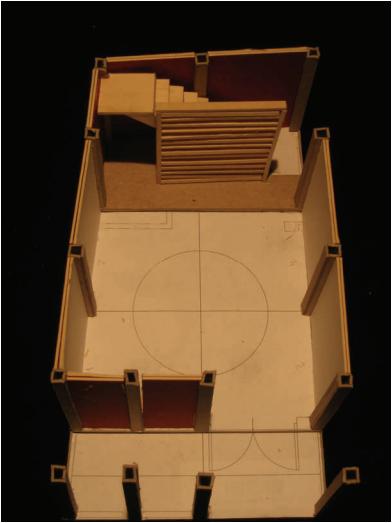
Concrete beams support the opening on the third floor and create the shape of a cross, representing the merge between the catholic church and Candomble.



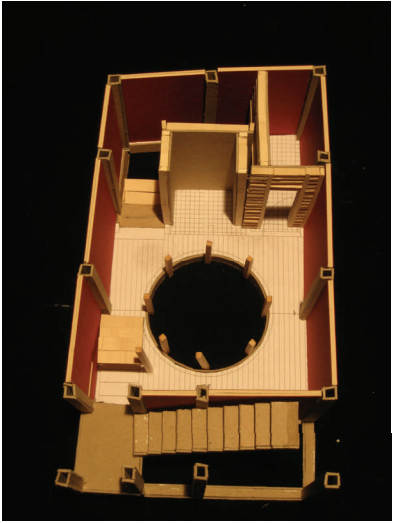
Study model



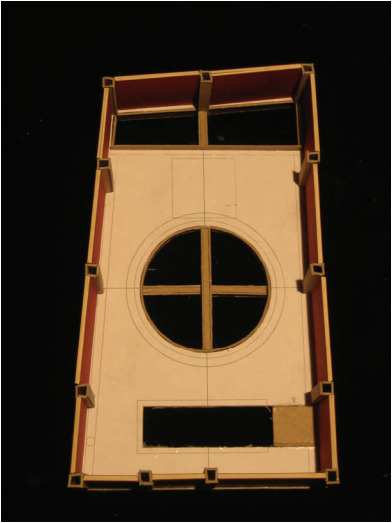
Study model birds eye view



First floor plan



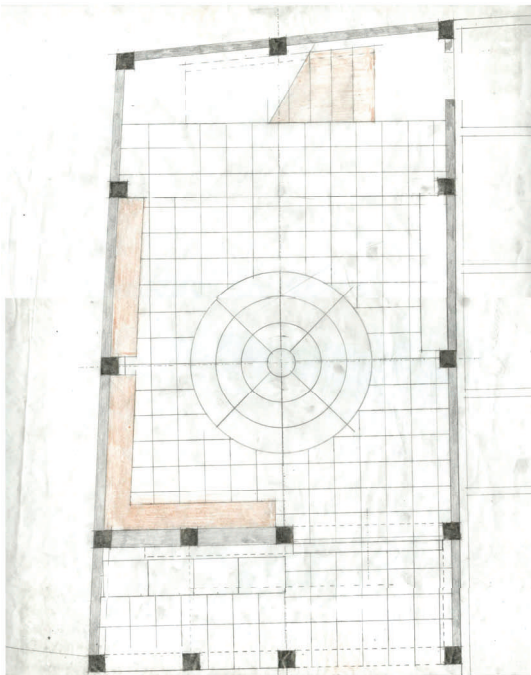
Second floor plan



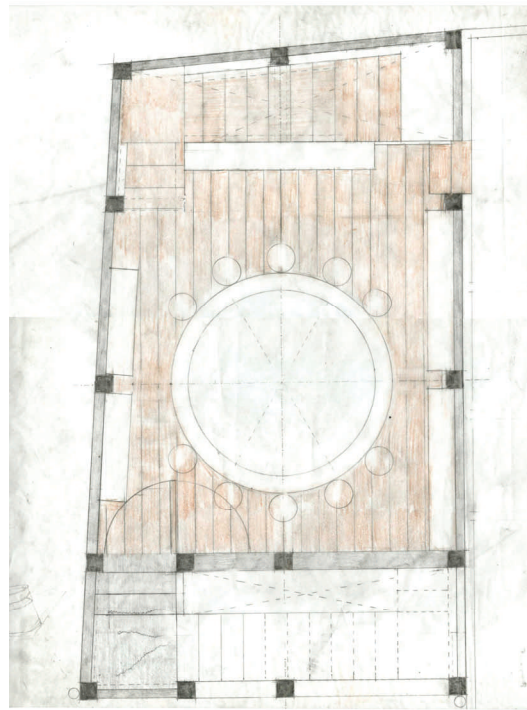
Third floor plan

Design studies-Scheme E

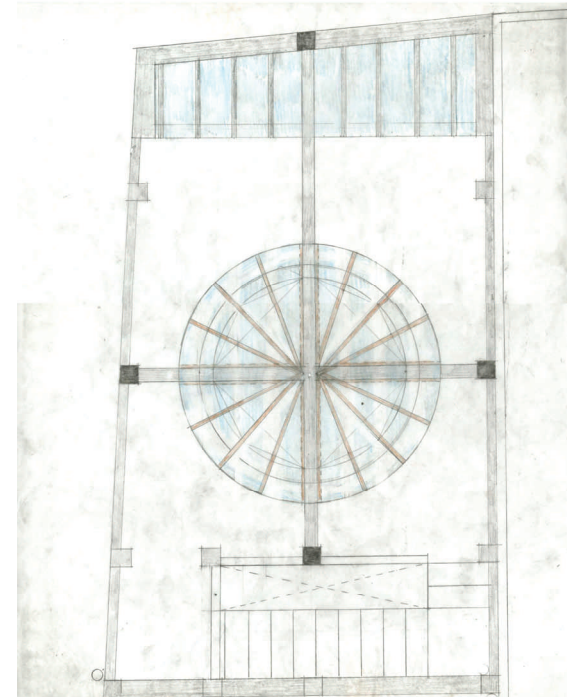
The design for scheme E consists of a similar idea for the first floor, including three major spaces. The front area for the entrance and the display of the Orixas, the middle area of the temple for the ritual space, and the back of the temple for the vertical circulation. A sliding door is added to the first floor, moving on a track outside of the building in the area of the Orixas. The second floor becomes the library space, with a reading table at the opening in the middle. The kitchen and the bathroom are removed to enhance the space. Bookshelves are added to the perimeter of the second floor. A door is added to the opening leading to the third floor. The stairs leading to the third floor are pushed out and tucked above the space where the shrines are on the first floor. The third floor has a glass block enclosure letting light come in through the center. The beams are removed from the slabs and are thickened to create flat reinforced concrete slabs.



First floor plan

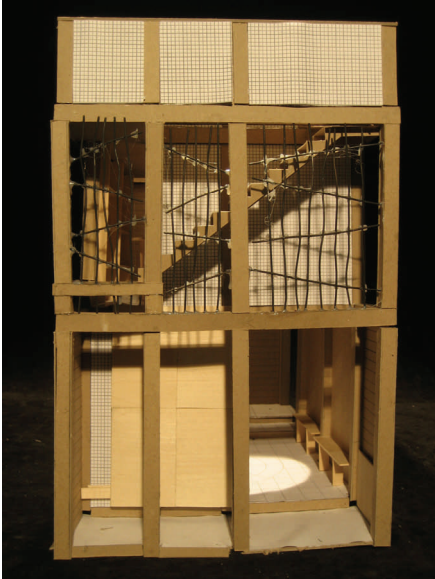


Second floor plan

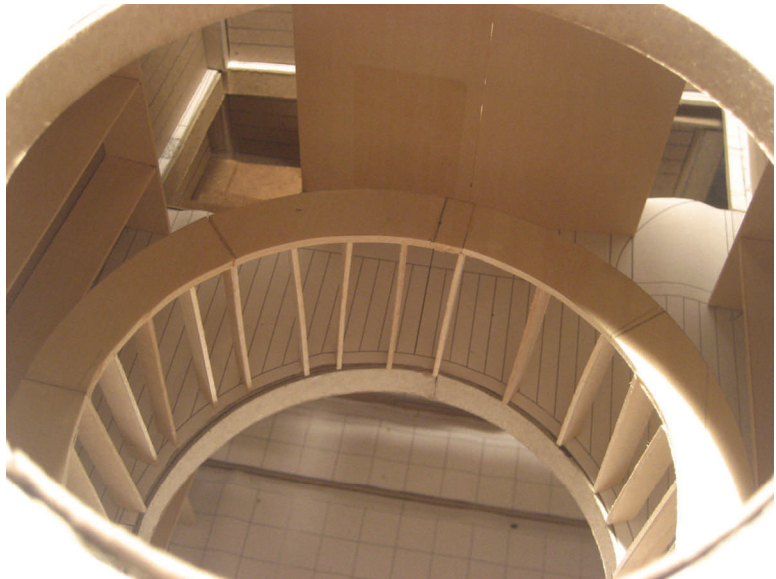


Third floor plan

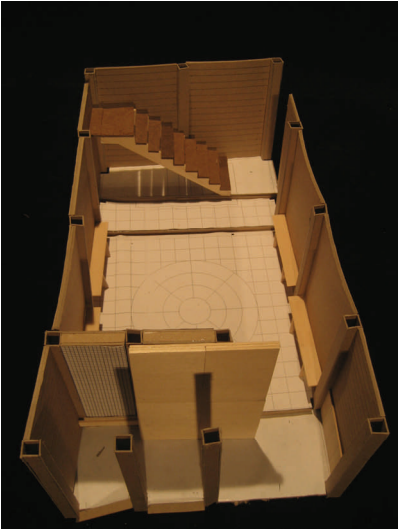
Design studies-Scheme E



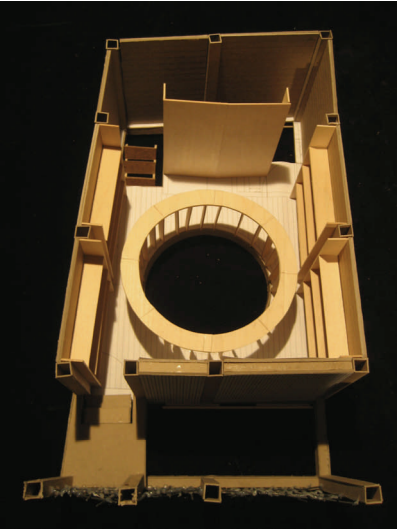
Study model



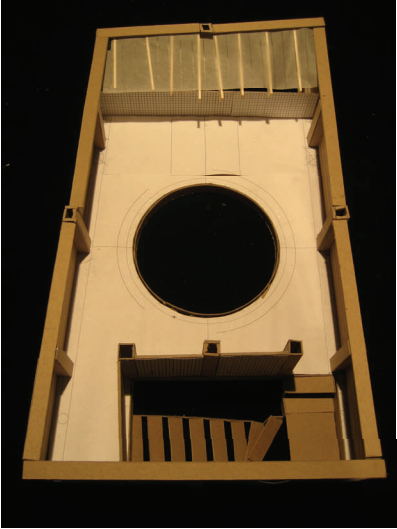
View looking into the First floor



First floor plan



Second floor plan



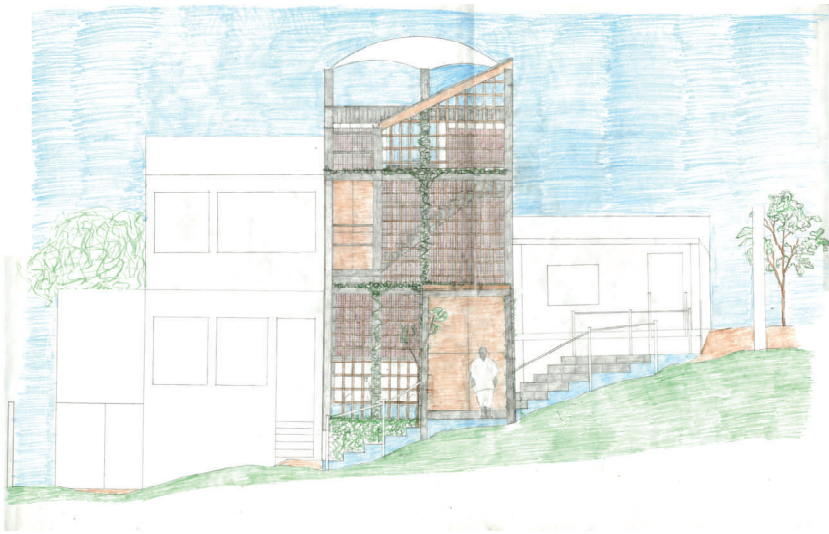
Third floor plan



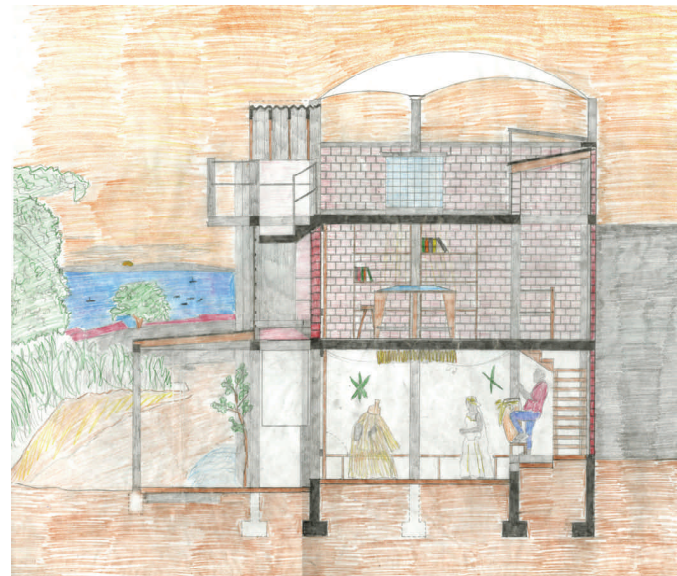
Interior perspective

Design studies-Scheme F

The most significant changes for the design for scheme F occur in the roof area. The first floor has the same entrance as in previous schemes and the middle ritual space with wrap-around benches. The stairs to the second floor are towards the back and they are relocated around the outer perimeter so the person moves vertically in a circular motion- the same direction as the ritual dance of Candomble. A canvas in the shape of the cross is added to replace the tall glass block cylinder with the roof on top. The front stairs are covered with a metal roof on top. The balcony on the third floor is cantilever, reaching out to the community.

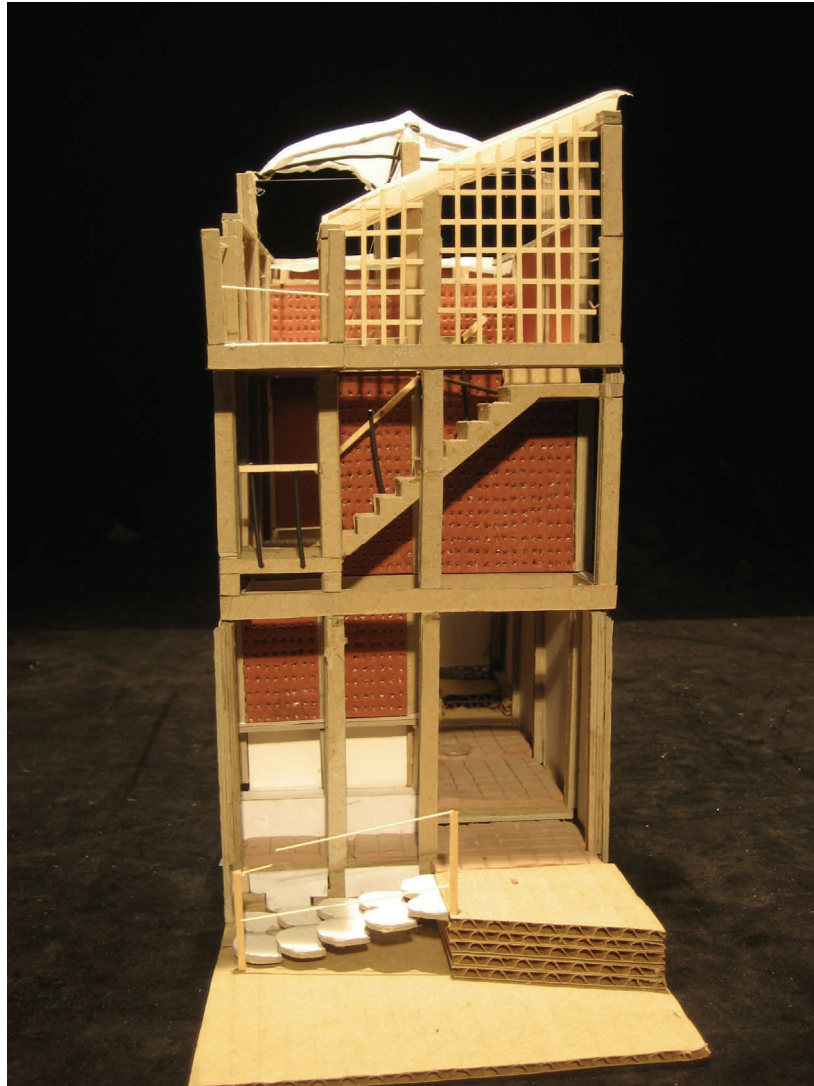


North elevation

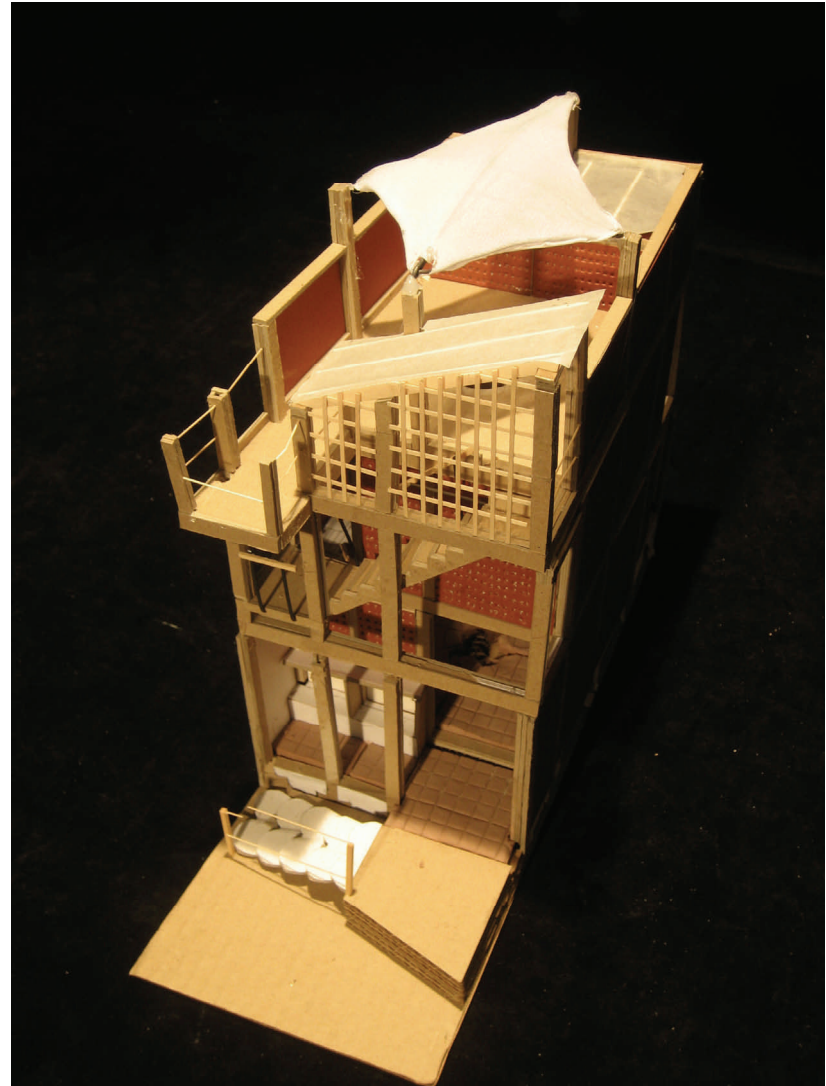


Longitudinal section

Design studies-Scheme F

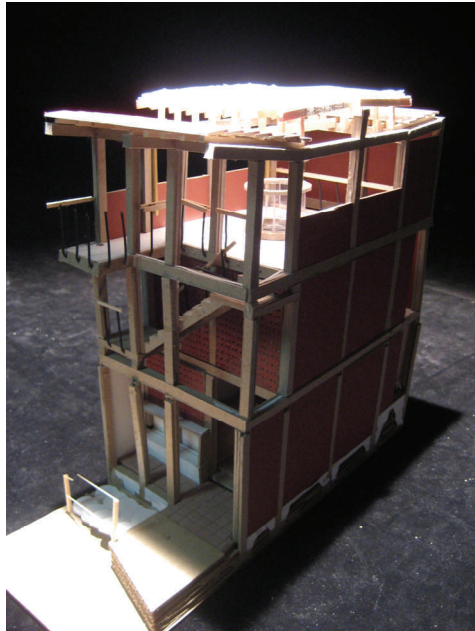


Study model



Bird's eye view

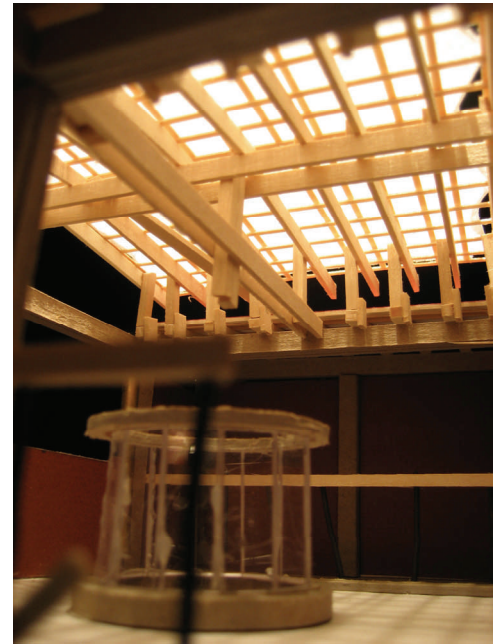
Design studies-Final study model



Bird's eye view



Study model



Roof framing view